patient and graft survival of 92.9% and 92.4% for biopsy arm, 97.9% and 94.1% for control arm. Both of the treatment arms were standard dose tacrolimus regimen. **CONCLUSIONS:** Three of immunosuppressive regimens are considered to have similar efficacy in short-term patient and graft survival in lower immunological risk renal transplant patients.

PUK5

CLINICAL AND DEMOGRAPHIC CHARACTERISTICS OF PATIENTS IN RENAL REPLACEMENT THERAPY IN SÃO PAULO, BRAZIL

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OBJECTIVES: This study aims to describe clinical and demographic characteristics of end-stage renal disease (ESRD) patients on renal replacement therapy in the São Paulo state, Brazil. **METHODS:** Cross-sectional analysis of São Paulo renal replacement therapy claims as reported in Brazilian Ambulatory Information System (SIA/DATASUS) database in January 2009. Repeated records were excluded using identification code, age, sex, and first treatment date as compatibility criteria. The following variables were investigated: diseases associated to ESRD, anemia, glucose levels, HCV, HbSAg, HIV, urea reduction ratio (URR), vascular access, and type of renal replacement therapy. **RESULTS:** A total of 18,360 patients were identified among 18,886 available claims, with a mean age of 54.23 years (SD = 15.53) and 57.7% male. Among 8,305 patients for whom secondary ICD-10 codes in addition to those related to renal failure itself were available, the more frequent conditions associated to ESRD were diabetes mellitus (17.5%), hypertension (26.4%) and glomerulonephritis (8.81%). Continuous Ambulatory Peritoneal Dialysis (CAPD) was the therapeutic strategy for 9.9% of patients compared to hemodialysis in 90.1%. 58.4% of all patients had hemodialysis vascular access and 50.9% had URR > 65%. Prevalence of positive HCV, HbSAg and HIV serology tests was 4.3%, 0.9% and 0.6%, respectively. Anemia and glucose levels > 126 were present for 45.4% and 19.6% of patients. The total amount paid for renal replacement therapy procedures in January 2009 in São Paulo state was 36,073,377 BRL. **CONCLUSIONS:** Although diabetes and hypertension renal complications can be prevented, they accounted for 43.9% of all conditions related to renal disease among the studied population. The findings also indicate that CAPD is still underused in Brazilian health care public system compared to other countries, as reported by previous local studies.

PUK6

POST RENAL TRANSPLANT PATIENT SURVIVAL AND THE COMBINED ADVERSE EFFECT OF POOR RENAL FUNCTION AND NEW ONSET DIABETES MELLITUS

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OBJECTIVES: A major challenge in the field of renal transplantation is to prolong patient survival. Previous studies have demonstrated that renal function at 1 year is a major determinant of long term patient survival. Furthermore, the development of new onset diabetes after transplantation identifies patients at high risk of cardiovascular events and mortality. This study aims to quantify any additive effect of impaired renal function and elevated glucose levels at 1 year post transplant on patient mortality. **METHODS:** Consecutive renal transplants from a single UK transplant centre over a 10 year period were analyzed using multivariate logistic regression in SPlus 8; the risk of patient mortality was assessed after stratification by renal function (measured by glomerular filtration rate (GFR)) and impaired fasting glucose levels. **RESULTS:** Data were available on 307 patients with fasting glucose and GFR measurements at 1 year post transplant. Overall 37% (n = 114) had a GFR of less than 40 mL/minute and of these, 24% (n = 27) had fasting glucose levels greater than 7 mmol/L. After adjusting for age, sex and donor factors patients with fasting glucose greater than 7 mmol/L and a GFR less than 40 mL/minute had a mortality odds ratio of 5.47 ($P < 0.01$) compared to those with glucose levels less than 5.6 mmol/l and a GFR greater than 40 mL/minute. **CONCLUSIONS:** This study demonstrates that the development of impaired fasting glucose post transplants is associated with a 35% increase risk of mortality and the development of new onset diabetes associated with a 2-fold increased risk. Our study further suggests that there is a negative synergistic effect of deteriorating renal function and progressive impaired glucose regulations on patient survival. Consequently, therapeutic strategies that could both improve GFR at one year and the incidence of diabetes might be expected to improve long term patient survival.

URINARY/KIDNEY DISORDERS – Cost Studies

PUK7

THE PHARMACY BUDGET IMPACT OF EXTENDING REIMBURSEMENT OF LANTHANUM CARBONATE TO TREATMENT OF HYPERPHOSPHATEMIA (>1.78 MMOL/L) IN PATIENTS WITH CHRONIC KIDNEY DISEASE PRE-DIALYSIS IN FRANCE AND THE UNITED KINGDOM

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OBJECTIVES: To examine the pharmacy budget impact (PBI) of extending reimbursement of non-calcium lanthanum carbonate (LC) to treatment of hyperphosphatemia (serum phosphorus > 1.78 mmol/L) in patients with chronic kidney disease pre-dialysis (CKD-ND) in France and the UK over five years. **METHODS:** The treated prevalence of CKD-ND and hyperphosphatemia, and the use of pharmacologic therapies, were estimated using published literature and EU nephrologist surveys. Drug costs were estimated from published sources. Market share changes were estimated from market research. Base-case analyses assumed complete medication compliance. Annual PBI was calculated as the difference in total drug costs between scenarios with and without the reimbursement extension for LC. Alternate scenarios and deterministic sensitivity analyses were also estimated. **RESULTS:** A small percentage of CKD-ND patients, 14,500 (7%) and 64,600 (14.6%), are estimated as hyperphosphatemic in France and the UK, respectively. Of these patients, 81% in France versus 30% in the UK are estimated to receive phosphate binder therapy. CKD-ND market share for LC is estimated at 12% in France and 1–2% in the UK. The label extension, adding hyperphosphatemic CKD-ND patients, is estimated to increase LC use primarily at the expense of calcium-based phosphate binders. The annual PBI from the label extension is estimated to grow over Years 1–5 from 0 to €1.1 M in France; and to be <£25,000 in Years 1–5 in the UK. Results are most sensitive to LC market share changes post-label extension. **CONCLUSIONS:** The number of CKD-ND patients with hyperphosphatemia (>1.78 mmol/L) eligible for LC treatment is minimal in France and the UK. Assuming complete compliance, the annual PBI after 5 years of a label extension for LC to CKD-ND patients is estimated to be €1.1 M in France and <£25,000 in the UK. Calcium is the predominant therapy in CKD-ND; however, adding LC may result in a low pharmacy budget impact.

PUK8

BUDGET IMPACT ANALYSIS OF ALISKIRENO IN TYPE 2 DIABETES PATIENTS WITH HYPERTENSION AND NEPHROPATHY IN THE MEXICAN INSTITUTE OF SOCIAL SECURITY

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OBJECTIVES: To determine the budget impact of Losartan + Aliskiren versus Losartan in type 2 diabetes patients with hypertension and nephropathy in the Mexican Institute of Social Security (IMSS). **METHODS:** An annual budget impact analysis of the use of aliskiren in the treatment of diabetic nephropathy in the IMSS was made considering four scenarios: a) Losartan + Aliskireno; b) Losartan; c) real prevalence of diabetic nephropaty and d) estimated prevalence of diabetic nephropaty. The source of epidemiologic data was the Health National Survey (ENSA 2006). Information source to estimate health benefits was AVOID study. Costing was performed through the technique of microcosting for replacement therapy with hemodialysis and peritoneal dialysis. The use of resources was the standard IMSS supportive care, costs are in 2009 USD. There was no discount rate considered due to annual temporal horizon. a probabilistic and non-probabilistic sensitivity analysis was performed. **RESULTS:** Aliskiren alternative prevents the use of dialysis in the real scenario of 5,946 patients, with expected savings of $ 95,461,538.46 USD, while in the estimated alternative prevents dialysis in 11.765 with expected savings of $188,846,153.85 USD. **CONCLUSIONS:** Aliskiren use investment prevents up to 11,765 patients requiring dialysis with savings for the health sector of more than 188 million USD.

PUK9

REAL-LIFE DOSING OF ERYTHROPOIESIS-STIMULATING AGENTS (ESAS) IN CHRONIC KIDNEY DISEASE (CKD)-ASSOCIATED ANEMIA: BUDGET IMPACT

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OBJECTIVES: Effective management of chronic kidney disease (CKD)-associated anaemia has been established for all erythropoiesis-stimulating agents (ESAs). The aim of this study was to establish the real-life doses and comparative costs of both short-acting ESAs and the newer longer-acting ESAs, darbepoetin alfa and the continuous erythropoietin receptor activator (C.E.R.A), and to forecast the impact of a change in current prescribing practice on health care budgets in Europe. **METHODS:** a retrospective chart review of CKD-associated anaemia management in 1014 pre-dialysis and 1016 dialysis patients was carried out by 261 nephrologists across the UK, Italy, Germany, Spain and France, between August 2008 and September 2009. Data collected on ESA dosing were used to populate a UK budget impact model comparing current prescribing practice with specific focus on C.E.R.A and darbepoetin alfa, over a five-year time horizon. Data on the number of patients, ESA market shares, and unit drug costs were derived from UK sources. **RESULTS:** The average monthly doses of ESAs in the combined five European markets (5EU) were as follows: epoetin alfa (pre-dialysis, 19,350 International Units (IU); dialysis, 35,404 IU); epoetin beta (pre-dialysis, 18,230 IU; dialysis, 36,789 IU); darbepoetin alfa (pre-dialysis, 107 µg; dialysis, 169 µg); C.E.R.A (pre-dialysis, 98 µg; dialysis, 150 µg). The model based on UK doses showed, that after five years, an increase in the use of C.E.R.A to 40% would reduce the overall ESA budget for CKD-associated anaemia by 15% compared to current prescribing practice. **CONCLUSIONS:** Based on real-life data, an increase in C.E.R.A prescribing may result in a cost-saving for the management of CKD-associated anaemia in the UK. This model can be applied to other European markets to forecast the local impact of a change in current prescribing practice.